

ABSTRACT

Compositions and methods for the detection, prevention, or treatment of anthrax or other infectious diseases. In one aspect, the present invention provides methods for immunizing humans or animals against *Bacillus anthracis* or other capsulated pathogens. The methods include administering a capsular polypeptide of a pathogen of interest and a CD40 agonist to a human or animal. The capsular polypeptide or the CD40 agonist is administered in such an amount or frequency that an immunoprotective response can be elicited in the human or animal against the pathogen of interest. In another aspect, the present invention provides methods of using passive immunization with anti-capsular polypeptide antibodies to prevent or treat infections caused by *Bacillus anthracis* or other pathogens. In yet another aspect, the present invention provides methods useful for diagnosis of anthrax by detection of capsular polypeptide in serum or other biological samples.